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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,862	02/20/2004	Kazuhiro Fujimaki	Q80021	4469
65565 7590 06/26/2007 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213				
			EXAMINER: LEE, SIN J	
			ART UNIT 1752	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/781,862	<b>Applicant(s)</b> FUJIMAKI, KAZUHIRO	
	<b>Examiner</b> Sin J. Lee	<b>Art Unit</b> 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8,10-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,8,10-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. In view of the amendment, previous 102(b) rejection over Hauck'792 and previous 102(a) rejection over Munnelly et al (WO'962) are hereby withdrawn.

#### ***Claim Rejections - 35 USC § 102***

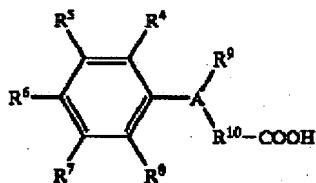
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5, 7, 11-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Munnelly et al (US 2003/0124460 A1).

In claim 1, Munnelly teaches an imageable element comprising a substrate and an imageable layer comprising an imageable composition. The composition contains a cyanine dye capable of absorbing IR radiation, a free-radical polymerizable compound and a free radical generating system comprising (a) a polyhaloalkyl-substituted compound capable of producing free radicals and (b) at least one carboxylic acid of the formula:



Art Unit: 1752

In claim 4, Munnelly teaches that the carboxylic acid can be N-phenyliminodiacetic acid, N-(carboxymethyl)-N-phenylglycine and (3,4-dimethoxyphenylthio)acetic acid. Since there are only three compounds listed, one skilled in the art would immediately envisage using (3,4-dimethoxyphenylthio)acetic acid as the carboxylic acid compound of Munnelly's composition. Such compound teaches present compound of formula (I) as well as formula (I-2). Therefore, Munnelly teaches present inventions of claims 1-3, 5, 7, 11-13 and 15.

4. Claims 1-3, 5, 7, 11-13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Munnelly et al (US 2004/0091811 A1).

In Example 3 (see Table 1), Munnelly teaches an IR-sensitive composition containing Sartomer 355 (multifunctional acrylic monomer), 2-(4-methoxyphenyl)-4,6-bis(trichloromethyl-2-triazine (a radical initiator), (3,4-dimethoxyphenylthio)acetic acid (present compound of formula (I) as well as formula (I-2)) and an IR dye. Munnelly coats his composition onto an aluminum substrate (see [0079]). Therefore, the prior art teaches present inventions of claims 1-3, 5, 7, 11-13 and 15.

#### ***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 5, 7, 8, 10-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munnelly et al (US 2003/0118939 A1).

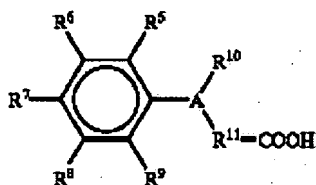
Munnelly teaches the following in claim 13:

Art Unit: 1752

## 13. A printing plate precursor, comprising:

a substrate; and

coated on said substrate an IR-sensitive composition comprising: a polymeric binder; and a free radical polymerizable system consisting of: at least one component selected from unsaturated free radical polymerizable monomers, oligomers which are free radical polymerizable and polymers containing C=C bonds in the backbone and/or in the side chain groups; and an initiator system comprising: (a) at least one compound capable of absorbing IR radiation; (b) at least one compound capable of producing radicals; and (c) at least one carboxylic acid represented by the formula:



wherein each of  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  is independently selected from the group consisting of: hydrogen, alkyl,

aryl, halogen, alkoxy, hydroxyalkyl, carboxyalkyl, alkylthio, alkylsulfonyl, sulfonic, alkylsulfonate, dialkylamino, acyl, alkoxycarbonyl, cyano and nitro; wherein  $R^5$  and  $R^6$ ,  $R^6$  and  $R^7$ ,  $R^7$  and  $R^8$ , or  $R^8$  and  $R^9$  together optionally form an aromatic or aliphatic ring; wherein  $R^{10}$  is selected from the group consisting of: hydrogen, alkyl, aryl, hydroxyalkyl, carboxyalkyl, acyl, alkoxycarbonyl, alkylsulfonyl and alkylsulfonate; or  $R^{10}$  and its bond together optionally form an electron pair; or  $R^9$  and  $R^{11}$  together optionally form a ring; wherein  $R^{11}$  is an alkylene group of  $C_1$ - $C_6$  carbon atoms; and wherein  $R^{10}$  and  $R^{11}$  together optionally form an aliphatic ring; wherein A is a heteroatom selected from the group consisting of: N, O and S; with the proviso that the total acid number of said polymeric binder is 70 mg KOH/g or less.

Based on this teaching, it would have been obvious to one skill in the art to have the compound (c) shown above, in which  $R^5$ - $R^9$  are H atoms, A is N,  $R^{10}$  is an alkoxycarbonyl group ( $-C(=O)-OR$ ) or a carboxyalkyl ( $-R-COOH$ ) and  $R^{11}$  is an alkylene group of  $C_1$  carbon atom (i.e.,  $-CH_2-$ ), in Munnelly's composition with a reasonable

Art Unit: 1752

expectation of obtaining a high speed negative working thermal printing plate. Such compound teaches present compound of formula (I) or (I-2). Therefore, Munnely's teaching renders obvious present inventions of claims 1-3, 5, 7, 8, 10-13 and 15.

***Allowable Subject Matter***

7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited prior arts teaches or suggests present compound of claim 6.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

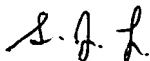
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/781,862

Page 6

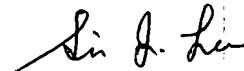
Art Unit: 1752

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee

June 23, 2007



**SIN LEE**  
**PRIMARY EXAMINER**